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Nota di contenuto	Semantic Unification: A Sheaf Theoretic Approach to Natural Language -- On Residuation -- Type Similarity for the Lambek-Grishin Calculus Revisited -- NP-Completeness of Grammars Based Upon Products of Free Pregroups -- Distributional Semantics: A Montagovian View -- A Logical Basis for Quantum Evolution and Entanglement -- Learning Lambek Grammars from Proof Frames -- Multi-Sorted Residuation -- Italian Clitic Patterns in Pregroup Grammar: State of the Art -- On Associative Lambek Calculus Extended with Basic Proper Axioms -- Classical Structures Based on Unitaries -- Initial Algebras of Terms with Binding and Algebraic Structure -- Abstract Tensor Systems as Monoidal Categories -- On Canonical Embeddings of Residuated Groupoids -- L-Completeness of the Lambek Calculus with the Reversal Operation Allowing Empty Antecedents -- A Note on

Multidimensional Dyck Languages -- Extended Lambek Calculi and First-Order Linear Logic -- A Categorical Type Logic -- Chasing Diagrams in Cryptography -- The Monotone Lambek Calculus Is NP-Complete -- A Mathematical Analysis of Masaccio's Trinity -- Conjoinability in 1-Discontinuous Lambek Calculus -- The Hidden Structural Rules of the Discontinuous Lambek Calculus.

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## Sommario/riassunto

For more than 60 years, Jim Lambek has been a profoundly inspirational mathematician, with groundbreaking contributions to algebra, category theory, linguistics, theoretical physics, logic and proof theory. This Festschrift was put together on the occasion of his 90th birthday. The papers in it give a good picture of the multiple research areas where the impact of Jim Lambek's work can be felt. The volume includes contributions by prominent researchers and by their students, showing how Jim Lambek's ideas keep inspiring upcoming generations of scholars.

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